

Carle Park in February, 1986

# Urbana—"Tree City USA"

Urbana, Illinois, has been annually designated "Tree City USA" by the National Arbor Day Foundation since 1976. The City has over 11,000 street trees, 6,000 park trees and 25,000 privately owned trees. Urbana strongly believes that trees are an invaluable environmental and aesthetic asset. Their leaves add cheerful color and shade to our homes and streets and perform the valuable functions of reducing urban noise and removing pollutants from the air. An urban tree population must be wisely and continually managed from one tree generation to the next to ensure that the benefits and pleasures of a healthy canopy of trees survives as a legacy to future generations.

The functions of a city park are many. Besides providing many forms of recreation, parks provide a quiet natural sanctuary and contribute culturally to the community. Our parks provide an opportunity for students and adults to observe growth form, flower, fruit and fall coloration of both native and introduced tree species.

One of our city parks displays a spectrum of trees that is an outstanding collection of mature trees in central Illinois. We heartily encourage you to take a self-guided walking tour of Carle Park, one of our finest city parks. Treat yourself to a one-hour break and take someone else on a short walk through Carle Park. The air is fresh and you will enjoy the exercise, relaxation and the trees. You especially may want to see the large English oak at the east end of the park. It is the largest of its species in Illinois and the second largest recorded in the United States.

Perhaps one of the reasons you enjoy living in Urbana-Champaign is the abundance of trees growing along our streets, in parks and on private property. The tour of Carle Park will help in learning more about trees and tree selection. It will help young students to appreciate that trees must be planted, provided annual maintenance and, when they decline, they must be removed and replaced.

March, 1986

# Carle Park Tree Trail

This booklet was prepared and published by the Urbana Tree Commission: Gene Himelick (Chairman), Natalie Alpert, Jeff Dawson, Bruno Schielzeth, Charlie Walters and Bill Kruidenier (City Arborist). Special recognition is given to the Urbana Park District and the City of Urbana for funding of the printing, and to Roberta Farrell, Secretary to the Commission, for preparing the manuscript for publication.

The publication was prepared as a community effort to focus public attention on the prominent living elements or features of our cityscape. We hope that the Carle Park Tree Trail will bring an increased awareness and appreciation of our urban

environment.

#### Carle Park — A Park for All Seasons

Carle Park, the second oldest park in the Urbana Park District system, has a long and colorful past. Created through the wisdom of a progressive woman, Mrs. Margaret Carle Morris, in 1909, the park has benefited from planting programs and capital improvements.

Today, visitors to the park enjoy innovative play structures and water features. The majestic statue of Abraham Lincoln was sculptured by Lorado Taft and donated to the Park District by Judge and Mrs. J.C.

Cunningham in 1927.

A valuable feature of the park is its wide variety of stately old trees. It takes a stretch of one's imagination to envision the park area as a barren piece of ground, but the majority of the hardwood trees were only planted during the last 80 years.

Carle Park offers a wide variety of passive and active recreational opportunities beneath its picturesque canopy of trees. The 8.3 acre park features a large picnic shelter, a number of picnic areas, open recreational areas, two wooden play structures and a

grass volleyball court.

The park is filled with color during the autumn months and offers a hint of crystal-line serenity for cross country skiers in the winter. Carle Park reawakens in the springtime with the sounds of children at play and hosts many family picnics during the summer. The Urbana Park District invites you to visit Carle Park throughout the year to enjoy it during all four seasons.

# Self-Guided Walking Tour of Trees in Carle Park

As the enclosed map indicates, the tour begins on the north side of Carle Park; however, you can start on the trail at any point. The 41 tree species listed in this publication are numbered for your convenience in identifying tree species. Less than one-half of the trees in the park are numbered. The remaining unmarked trees will test your ability at tree identification. Additional tree species will be added to the park in future years. The average heights are listed for those species growing in the park and are given for the height normally reached at maturity in urban areas.

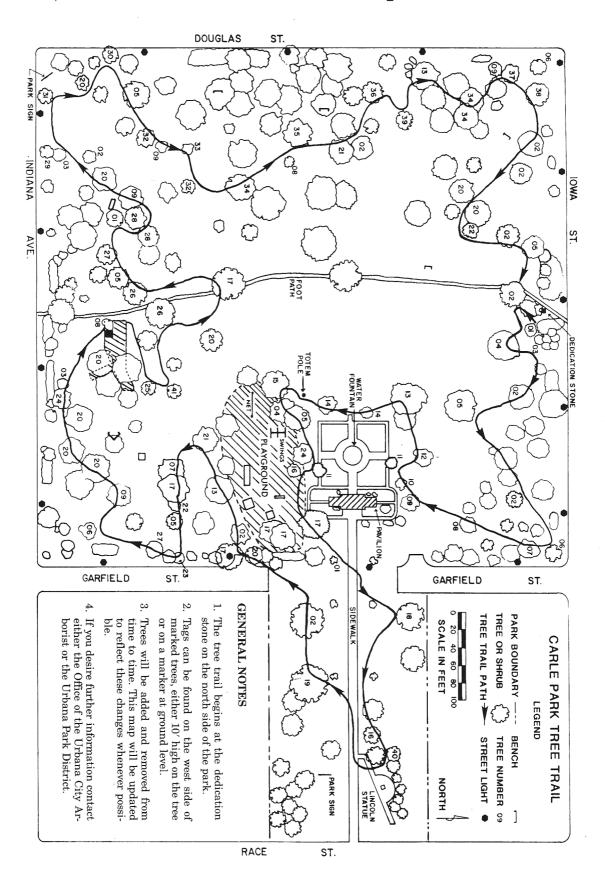
Many of the tree species in the park grow too large for the average home grounds and should only be planted in park situations where there is unlimited space for both roots and crowns. The tree you plant on your lawn today can beautify or detract from your home. Wise planning and careful tree selection will both enhance property values and increase city assets. In time, other tree species planted in the park for your enjoyment and evaluation will include additional tree species that are desirable for use around the home.

#### **Information on Tree Identification**

Trees are the most conspicuous and largest members of the Plant Kingdom. Each tree species has certain characteristics in leaf, flower, seed, bark and form that separate it from others. The process of identifying a particular tree the first time may require the use of a "key". To help you in the process, the Urbana Free Library has a collection of tree books for those who desire assistance. One booklet that is exceptionally good to assist lay-persons in identification of trees is: "Key to the Trees of Urbana-Champaign", by Almut Jones and Alan Haney.

A key for tree identification essentially asks you a series of questions; each one gives you two answers. You then choose what appears to be the correct answer and go to the next question. Thus by following through the series of questions, the key leads you to a final question that identifies the tree. Trees are separated into two major groups: Gymnosperms (conifers) like pines, spruces, ginkgo, bald cypress and their relatives, and the Angiosperms (broad-leaved flowering trees) like oak, maple, willow and ash.

# Carle Park Map



# Tree Species Legend for Walking Trail

Tree			
Tag No.	Tree Species	21	Horsechestnut
	Eastern Redbud	22	Red Maple
$02 \dots$	Sugar Maple	23	Black Cherry
	Downy Hawthorn	24	Austrian Pine
04	American Sycamore	25	Amur Maple
05	Tuliptree	26	Serviceberry
06	Red Oak	27	Norway Spruce
07	Basswood		Shingle Oak
08	Hackberrry	29	Douglas fir
09	White Ash	30	Green Ash
10	Flowering Dogwood	31	Bald Cypress -
11	Apple	32	Norway Maple
	Littleleaf Linden	33	Silver Maple
13	Northern Catalpa	34	White Oak
14	Crabapple	35	Slippery Elm
$15 \dots$	Variegated Elm	36	Swamp White Oak
16	Black Gum		Black Walnut
17	English Oak	38	European Euonymu
18	Ohio Buckeye		American Beech
19	Siberian Elm	40	White (Concolor) Fir
20	Pin Oak	41	Chinese Chestnut

# 1 — EASTERN REDBUD,

Cercis canadensis

Ave. Ht. 30'
This tree has reddish flowers in early spring and in the fall the tree develops a peashaped pod containing bean-like seeds. Dark green heart-shaped leaves in summer, turn yellow in fall. The redbud is one of our most attractive small native trees and is tolerant of shady sites around the home.

# 2 — SUGAR MAPLE,

Acer saccharum Ave. Ht. 60' This tree grows naturally in every state east of the Great Plains, except Florida, South Carolina and Delaware. The name comes from the fact that the tree's sweet sap is boiled to make maple sugar and syrup (about 40-50 gallons of sap to make a gallon of syrup). A long-lived tree, especially tolerant of Illinois environment, except where air pollution or other forms of pollution become a limiting factor. Leaves turn shades of yellow, orange and red in fall. This tree is our most beautiful of all trees for fall color. It is a moderately slow growing tree and long-lived.

# 3 — DOWNY HAWTHORN,

Crataegus mollis

Ave. Ht. 25'
Downy hawthorn has a rounded top at maturity. It has thorns along its branches and small leaves that turn yellow-bronze to bronze-red in fall. White flowers appear in early May and red edible fruit 3/4" diameter appear in late August. The thorny branches sometimes make it less desirable as a land-scape plant. The seed of the tree is distributed by fruit-eating birds or rodents which results in the establishment of the tree on abandoned fields and neglected pastures.

# 4 — AMERICAN SYCAMORE.

Platanus occidentalis Ave. Ht. 70′ The sycamore is one of the largest and tallest tree species that grows in Illinois. In open wooded areas, individual trees may grow to 140 feet tall and up to 14 feet diameter. The round 1″ diameter fruit ripens in October and often persists through the winter. The white and gray patchy bark is unique; however, due to the tree's size and susceptibility to a disease called anthracnose, it is not recomended as a residential tree. Medium green leaves with no significant fall coloration.

# 5 — TULIPTREE,

Liriodendron tulipifera Ave. Ht. 70' This fast growing stately tree has a pyramidal shape in youth, maturing to ovalrounded. Leaves are medium green in summer, changing to yellow in fall. The 1-2" tall rather inconspicuous greenish-vellow flower appears in May. The fruit is cone-like and stands upright on the branches. It has limited use as a street tree because of its potential large size and relatively weak wood. The inner bark has been used for a tonic and hydrochlorate of tulipiferine, a heart stimulant. This tree can grow as tall as the American sycamore and reach heights of 130-140 feet. The tallest tuliptree in Carle Park is 88 feet tall (8/29/85).

#### 6 — RED OAK.

Quercus rubra Ave. Ht. 60' The leaves are a dark green in summer changing to russet-red or bright red in fall. The fruit is an acorn which is 3/8-1" long appearing in fall. Where space permits, the red oak is valuable and long-lived as a residential tree and is tolerant of adverse city conditions. All of the several species of oaks are divided into two groups: red oak (have bristle tips on lobes of the leaves) and white oaks (whose leaves have rounded lobes). Trees four inches in diameter and larger are difficult to transplant.

# 7 — BASSWOOD (AMERICAN LINDEN),

Tilia americana Ave. Ht. 70' Leaves dark green on top and pale green beneath, turning a dull yellow in fall. The pale yellow fragrant flowers are borne in clusters of 5 to 10 and appear in mid- to late June. In the forest, the trees may grow to 100 feet tall and 4 feet in trunk diameter. Buds are dark red and become mucilaginous when chewed. Bast fibers of the inner bark were used by Indians in making cords, fish nets and mats. Desirable as a street tree when young; however, subject to ice and

wind damage when mature.

#### 8 — HACKBERRY,

Celtis occidentalis

Weakly rounded in youth, developing a broad crown at maturity that resembles the American elm. Leaves medium green in summer, turning a dull yellow in fall. The 1/3" diameter fruit is orange-red to dark purple and ripening in September to October. A long-lived tree in central Illinois. Thick clusters of twigs, called "witches' brooms", sometimes produced on hackberry are caused by a fungus disease that is normally not detrimental.

#### 9 — WHITE ASH,

Fraxinus americana Ave. Ht. 80' Largest of the ten species of ash. Compound leaves are dark green on top and light green beneath, turning yellow in fall. Some new selections of white ash (Autumn Purple, Autumn Applause) turn maroon or purple in fall. As a young tree, the white ash is highly desirable as a street or shade tree; however, older trees are subject to occasional wind damage.

# 10 — FLOWERING DOGWOOD,

Cornus florida Ave. Ht. 20' Dogwood is known for its large showy white bracts of the flowers that appear in spring prior to leaf development. Leaves are dark green in summer, turning red to reddishpurple in fall. This is a valuable small, flowering specimen tree with excellent four-season characteristics. Berry-like fruit is shiny red. Indians obtained scarlet dye for dyeing blankets, etc. Brownish wood is hard and fine grained. Dogwood grows well in the shade of larger trees. This tree is difficult to transplant and is subject to injury by bark borer insects.

#### 11 — APPLE species,

Malus, spp. Ave. Ht. 15-30' There are many cultivated varieties and species of both ornamental and commercial apple trees. The ornamental varieties are grown for their beautiful spring flowers and showy fruit. This apple tree is an unknown species. A small white flower appears in spring prior to leaf development. The 3" diameter apple matures during fall. There is limited use for this species as a landscape plant because the fruit causes litter.

# 12 — LITTLELEAF LINDEN,

Tilia cordata

Ave. Ht. 60'
A European species introduced into the US.
The leaves are a dark shiny green in summer, turning yellow-green in fall. The fragrant yellow flower is borne in 5-7 flowered

pendulous clusters and appears in late June or early July. This is an excellent landscape tree having moderately fast growth and is tolerant of city conditions.

# 13 — NORTHERN CATALPA,

Catalpa speciosa
Ave. Ht. 50'
This tree is an excellent specimen. It is 12.8 feet in circumference and 83 feet tall (8/29/85). The crown is an irregular oval with the leaves medium green in summer turning a dull yellow in fall. The tree is known for its flower and fruit. The 2" long flower is borne in large, upright, terminal panicles 4-8" long, blooming in early June and the fruit is a long slender pod forming during the summer. Because of its rather brittle wood, it is not recommended for urban planting. This tree was struck by lightning a few years ago.

#### 14 — ORNAMENTAL CRABAPPLE,

Malus sp. Ave. Ht. 10-25' There are over 100 species and cultivars of crabapples varying in foliage, flowers, fruit, habit and size grown in North American nurseries. Ornamental crabapples are an outstanding group of small flowering trees for landscape planting. In selecting crabapples, it is important to select not only for form and flower, but especially for resistance to disease. Flower color and size depend on species, vary from white to red and are borne in April or May. There are few other trees which approach the beauty of a crabapple tree in full flower. Leaf colors vary with species; most are not known for their fall color. Typical small fruits borne in the fall, some with striking red and yellow colors.

#### 15 — VARIEGATED ELM,

Ulmus sp. Ave. Ht. 50' A good specimen, 9.6' in circumference and 62 feet tall (8/29/85). This tree is not available commercially. The form is similar to the slippery elm. This tree may be a variety of a European elm species. The leaves are medium green with a white variegation in summer turning dull yellow in fall. At one time there were two of these elms in Carle Park. This specimen elm has survived Dutch elm disease and phloem necrosis disease for 35 years, and probably is resistant to the two diseases.

#### 16 — BLACK GUM,

Nyssa sylvatica Ave. Ht. 60' Also called black tupelo, tupelo gum, water tupelo. Trees grow naturally in locations near swamps which may be under water for a portion of the year, such as southern Illinois swamps. A large tree growing to

heights of 100 feet in the forest with a trunk of over three feet in diameter. Leaf color is a beautiful dark green in summer, turning yellow, orange, red or purple in the fall. The dark purple ½" bluish fruit, which ripens in late September, attracts a wide variety of birds. Though difficult to find locally, the tree can be a garden curiosity. Black gum is a moderately fast growing tree when young and is a difficult tree to transplant in sizes larger than 2" in diameter.

#### 17 — ENGLISH OAK,

Quercus robur Ave. Ht. 70' majestic This oak develops massive branches, a broadly rounded crown with the leaves a dark green in summer. The leaves turn brown in fall and often persisting well into winter. One-third of the 11/2" acorn is enclosed by the cap. It is a species belonging to the white oak group that has leaves with rounded lobes. This is an excellent specimen for large open areas. The tree, No. 17, closest to the pavilion is the largest of its species in Illinois, and second largest of its species in the U.S. It is 12.8 feet in circumference and 91 feet tall (8/29/85). A second English oak approximately 100 feet southwest is the second largest in the state with a circumference of 10.9 feet and 103 feet tall (8/29/85).

# 18 — OHIO BUCKEYE,

Aesculus glabra Ave. Ht. 40' Compound leaves open bright green, turning dark green in summer to yellow and at times orange-red in fall. The greenish-yellow flowers form along a terminal shoot 4-7" long in mid-May. The dark brown fruit has a very prickly outer shell. The Buckeye has limited use in the residential landscape due to the fruit.

# 19 — SIBERIAN ELM,

Ulmus pumila Ave. Ht. 60' Leaves are dark green, turning greenish-yellow in fall. This elm species has weak, breakable branches and is not recommended for planting. During ice and wind storms, this tree and the silver maple sustain the majority of limb breakage. It is a fast-growing tree that survives drought periods and grows reasonably well in poor soil. It is a species not recommended for planting around the home or along streets because of high maintenance required for regular branch pruning.

#### 20 — PIN OAK,

Quercus palustris Ave. Ht. 60' One of the tallest trees in Carle Park is a pin oak in the southeast corner of the park. It measures at 8.6 feet in circumference and 113 feet tall (8/26/85). The tree has a strong central leader with the lower branches being pendulous, middle branches horizontal and the upper branches upright. The leaves are a dark glossy green in summer, turning a dark bronze or red in fall. The ½" long and wide acorn matures in the fall. In urban areas it has a serious tendency to turn yellow with a disease called chlorosis. Considering the availability of many other superior oak species, the planting of the pin oak in this area should be avoided.

#### 21 — HORSECHESTNUT.

Aesculus hippocastanum — Ave. Ht. 50′ Introduced from Europe in eighteenth century. Used as shade tree in both Old World and U.S. Compound leaves dark green, turning dull yellow to brown in fall. Tree has white flowers borne in mid-May on upright shoot 5-12″ long. Fruit 2 to 2½″ diameter matures in September. The Horsechestnut is nice for open areas; however, a leaf disease called leaf blotch limits its extensive use.

#### 22 — RED MAPLE,

Acer rubrum

Ave. Ht. 50'
Leaves are dark green in summer, turning yellow to brilliant red in fall. The small, ruby red flowers appear in mid- to late April, in dense clusters prior to leaf development. The 3" fruit is double-winged in shape and about 1/4" long. This is a good specimen tree for lawn, park or street. Many new and outstanding horticultural selections of red maple are currently available. Pioneers made ink and brown and black dyes from bark extract. The wood resembles sugar maple, but the heartwood is light brown tinged with red.

#### 23 — BLACK CHERRY,

Prunus serotina Ave. Ht. 50' The black cherry has an upright-oval form. The leaves are a waxy dark green in summer, turning yellow to red in fall. The 2/5" white flowers appear in May in clusters 4-6" long. The 3/8" diameter reddish-purple fruit ripens in late August often are a serious nuisance problem when cherry trees are grown around the home. Not recommended as a street or yard tree. The wood is used to make beautiful furniture.

#### 24 — AUSTRIAN PINE,

Pinus nigra

Ave. Ht. 50'
This evergreen tree is a native of Europe and cultivated in U.S. In Europe, it occasionally grows to heights of 100 feet and trunk diameters 3 feet. Not important in U. S. as a commercial source of lumber. Trees more than 50 feet tall are exceptional in U.S. The

needles develop in pairs and are stout and stiff with sharp tips. The cones are 2-3'' long and 1 to  $1\frac{1}{2}''$  wide. Recently a vascular fungus disease has been reported which is a serious problem for this and some other species of pines.

#### 25 — AMUR MAPLE,

Acer ginnala Ave. Ht. 20' This small tree is nice either as a single or multiple stem specimen. The leaves are a glosssy green, changing to yellow and red in the fall. The fragrant, yellow-white flowers appear in April as the leaf buds open. The winged fruit, 3/4" in length, appear in September. A delicate, small tree for residential use.

# 26 — SERVICEBERRY,

Amalanchier arborea Ave. Ht. 25' Compound leaves are a medium green in summer, turning from yellow to orange to red in fall. The white flowers are borne in pendulous clusters 2-4" long appearing in mid-April. The ¼" diameter fruit ripens in June changing from green to red to purple, and is attractive to birds. The mature size and fall color make this tree ideal for limited residential spaces.

# 27 — NORWAY SPRUCE,

Picea abies Ave. Ht. 50' Tree is pyramidal in youth, growing at maturity with long, graceful, pendulous branches. The cones are 4-6'' long,  $1\frac{1}{2}-2''$  in diameter, and mature in one year. This tree may be used as a windbreak or planted as a specimen when adequate space allows. When it is grown as a specimen tree, it will require a 25' diameter space.

# 28 — SHINGLE OAK,

Quercus imbricaria Ave. Ht. 50' Leaves are dark shiny green in summer, turning a dull brown in fall and often persisting on the tree through the winter. The acorn is 5%" in length. The tree is typical of those species in the red oak group (each leaf has a sharp point). French colonists settled at Kaskaskia, Illinois (around 1750) and used this oak for making shingles for their homes, thus the name. The tree must be propagated from seed as it is not grown in commercial nurseries.

# 29 — DOUGLAS FIR,

Pseudotsuga menziesii Ave. Ht. 40' A widely distributed western tree, growing to a height of 325 feet with trunk diameter of 10-17 feet. In Illinois, however, it grows to 40-50' in height. The branches are straight and stiff, forming a narrow cone shape at maturity. The cones are 3-4' long

by 1-1/2" to 2" wide. The Douglas. fir is a good tree as a specimen or in a grouping. Note the soft feel of the needles compared to the stiff prickly needles of the Norway spruce.

# 30 — GREEN ASH,

Fraxinus pennsylvanica Ave. Ht. 60' A tree of moist bottomlands in half of U.S. east of Great Plains. Compound leaves are medium green, turning yellow in fall. The 1-2" long fruit is ¼" wide and borne in clusters. Very adaptable to most soils; however, at maturity it tends to be weak-wooded and often is heavily damaged during our occasional bad ice storms. This is a moderately fast growing tree with limited use on private property.

#### 31 — BALD CYPRESS,

Taxodium distichum Ave. Ht. 60' This unique deciduous conifer (evergreen) has a slender pyramidal form with horizontal branching. Feathery leaves are a soft green in summer, turning a light brown in fall. The cones are rounded and approximately 1" across. The wood is noted for its quality to withstand decay. The tree grows in swamps and grows moderately fast in most urban soils. It has few disease and insect problems. Bald cypress is an excellent tree for planting in this area where a pyramidal form can be used.

#### 32 — NORWAY MAPLE,

Acer platanoides Ave. Ht. 50'. The form is typically a symmetrical rounded crown with very dense foliage. The leaves are dark green in summer, turning yellow in fall. The 1½" long wing fruit matures in late September. The tree resembles sugar maple but grows faster and is shorter lived in Illinois. Norway maple is not long lived in this area and other species of maples are much more reliable as shade or ornamental trees. It may be identified by having milky juice produced from the broken leafstalk (petiole). Sugar maple produces clear sap.

#### 33 — SILVER MAPLE.

Acer saccharinum Ave. Ht. 60' The leaves are medium green on top with a lighter underside turning yellow in fall. The 1½" winged fruit matures in late May. This tree is not recommended for residential use because of its weak-wooded nature and susceptibility to damage during ice storms.

#### 34 — WHITE OAK,

Quercus alba Ave. Ht. 60' State tree of Illinois. It is a long lived and important timber tree that grows to 100 feet

tall and occasionally five feet in diameter. Leaves ae medium green in summer, turning brown or at times a rich red in fall often persisting through winter. Stately tree for large open areas. As a street and shade tree, white oak is superbly suited to this area. Early settlers found many large trees growing in the immediate area, few of which now remain. Originally desired for its strength and durability, it now is used for furniture and flooring.

#### 35 — SLIPPERY ELM,

Ulmus rubra Ave. Ht. 60' Leaves are medium green in summer, turning a dull yellow in fall. It is not recommended for residential use and is susceptible to the dutch Elm disease. The name "Slippery" comes from the moist inner bark which the pioneers chewed to quench their thirst. Also called "red elm". Heartwood is a reddish brown color and occasionally used for furniture and crossties.

# 36 — SWAMP WHITE OAK,

Quercus bicolor Ave. Ht. 50' The name bicolor refers to two contrasting colors of the leaf — dark green above the pale, silvery white below. In New York state, early settlers and Indians knew it as the "Big Tree" (27' in circumference), near which Robert Morris made a treaty with Seneca Indians in 1797. Has a broad, open, rounded crown and does well as a street or shade tree, particularly in moist places. The 1" long acorns usually found in pairs make for fat and sassy squirrels. It is a relatively slow growing tree.

#### 37 — BLACK WALNUT.

Juglans nigra Ave. Ht. 50' Compound leaves are medium green in summer, turning dull yellow in early fall. One of the first trees to drop its leaves. The nut is enclosed in a 1 to 1½" diameter semifleshy husk which stains whatever it contacts. There is limited ornamental value for residential use and it is difficult to transplant. Has been used since earliest American history for fine furniture, paneling and wood working. Abraham Lincoln split walnut logs into fence rails. Because of a chemical, juglone, produced in the leaves and bark, many plants cannot grow near walnut trees. Also wood chips used as bedding are known to be poisonous to horses.

# 38 — EUROPEAN EUONYMUS,

Euonymus europaeus Ave. Ht. 20' The form is narrow and upright with the leaves dark green in summer, turning yellow to reddish-purple in fall. The pink capsule-shaped fruit is about ½" in width. This

tree can be used in groupings or as a specimen, with the fruit being a very attractive feature in the fall. A rare tree in Urbana that is more commonly seen as a large shrub. Since a tree may be defined as something that a little boy or girl can climb, we will call this a tree.

#### 39 — AMERICAN BEECH,

Fagus grandifolia Ave. Ht. 50' Has a sturdy appearance, typically with a short trunk and wide-spreading branches on the lower half of the crown. Leaves are dark green in summer, turning a golden bronze in fall. The smooth bark is light bluish-gray to silver. A beautiful tree for large areas. An American beech forest (as found in west central Indiana) is worth viewing in early spring and fall. J.V. Crockett noted, "If the word noble had to be applied to only one kind of a tree, the honor would probably go to the beech." Though beech tends to be difficult to transplant or establish, it is well worth the effort.

# 40 — WHITE (CONCOLOR) FIR,

 $Abies\ concolor$ Ave. Ht.:50' The native habitat is western and southwestern U.S. This evergreen tree is usually called concolor fir in Illinois and is one of the best of the firs for this area. It withstands heat, drought and cold equally well, grows best in moist well-drained soil and tolerates growing in light shade. The foliage is soft, bluish green and needlelike. It will grow 1½ feet a year under good growing conditions. Because of its softer-looking appearance, it could replace the popular blue planted around spruce often Crushed foliage gives a strong lemon-balm aroma. The fruit is a 3-6" long stalked cone that can be pale green and sometimes a purplish color.

#### 41 — CHINESE CHESTNUT,

Castanea mollissima Ave. Ht. 50' This tree species was introduced in the U.S. about 1903 from China. Because of a serious disease called chestnut blight, almost all of our native American chestnut trees have been killed. The Chinese chestnut is believed to be highly resistant to the blight and is the only chestnut species having nuts suitable for eating. The flowers on one tree are self-sterile and require that two trees be grown in the same vicinity so that the flowers will be pollinated and produce nuts. One to three nuts are enclosed in a prickly husk and the husks can be a problem in private lawns. The lustrous, rather dense, foliage turns yellow to bronze in the fall.